

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A liquid phase process for the synthesis of mesitylene in the absence of added hydrogen which comprises treating pseudocumene with a catalytic composition comprising a zeolite, in acid or prevalently acid form, selected from ZSM-5 zeolite having a crystal lattice made up of silicon oxide and aluminum oxide, and ZSM-5 modified by the partial or total substitution of Si with a tetravalent element and/or the partial or total substitution of Al with other trivalent elements, wherein said process is carried out exclusively in the liquid phase at a temperature of from 250 to 375°C and a pressure of between 5 and 50 bar, and wherein said process is conducted in the absence of added hydrogen.

Claim 2 (Previously Presented): The process according to claim 1, wherein the catalytic composition comprises ZSM-5 zeolite having a crystal lattice made up of silicon oxide and aluminum oxide.

Claim 3 (Previously Presented): The process according to claim 2, wherein the molar ratio between silicon oxide and aluminum oxide is higher than 20.

Claim 4 (Previously Presented): The process according to claim 3, wherein the molar ratio between silicon oxide and aluminum oxide ranges from 20 to 1000.

Claim 5 (Previously Presented): The process according to claim 4, wherein the molar ratio between silicon oxide and aluminum oxide ranges from 25 to 300.

Claim 6 (Previously Presented): The process according to claim 1, wherein the catalytic composition comprises the zeolite in a bound form, with a binder selected from alumina, silica, magnesia, zirconia or mixtures thereof.

Claim 7 (Previously Presented): The process according to claim 6, wherein the weight ratio between zeolite and binder ranges from 5:95 to 95:5.

Claim 8 (Previously Presented): The process according to claim 7, wherein the weight ratio ranges from 20:80 to 80:20.

Claim 9. (Cancelled)

Claim 10 (Cancelled)

Claim 11. (Cancelled)

Claim 12 (Previously Presented): The process according to claim 1, wherein the WHSV space velocity is between 0.1 and 10 hours⁻¹.

Claim 13 (Previously Presented): The process according to claim 1, carried out continuously, in a fixed bed reactor.

Claim 14 (Previously Presented): The process according to claim 1, wherein the pseudocumene is de-oxygenated before being treated with the catalytic composition.

Claim 15 (Previously Presented): The process according to claim 14, wherein the pseudocumene is de-oxygenated by means of degassing by saturation with an inert gas or by boiling.

Claim 16 (Previously Presented): The process according to claim 1, wherein the pseudocumene used comes directly from distillation, without intermediate storage.

Claim 17 (Previously Presented): A process for regenerating a catalyst, at least partially exhausted, which comprises treating said catalyst at a temperature ranging from 450 to 550°C, at a pressure ranging from 1 to 3 bar, with mixtures of oxygen and nitrogen in a ratio ranging from 0.1 to 20% by volume, and with a GHSV space velocity of between 3000 and 6000 hours⁻¹, wherein said catalyst is a catalyst previously used in a process for the synthesis of mesitylene which comprises treating pseudocumene with a catalytic composition comprising a zeolite, in acid or prevalently acid form, selected from ZSM-5 zeolite having a crystal lattice made up of silicon oxide and aluminum oxide, and ZSM-5 modified by the partial or total substitution of Si with a tetravalent element and/or the partial or total substitution of Al with other trivalent elements.

Claim 18 (Previously Presented): The process according to claim 1, wherein said catalytic composition comprises ZSM-5 modified by the partial or total substitution of Si with a tetravalent element and/or the partial or total substitution of Al with other trivalent elements.

Claim 19 (Previously Presented): The process according to claim 18, wherein said catalytic composition comprises ZSM-5 modified by the partial or total substitution of Si

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with Ti or Ge and/or the partial or total substitution of Al with Fe, Ga or B.

Claim 20 (Previously Presented): The process according to Claim 1, wherein said process consists essentially of contacting said catalytic composition with said pseudocumene.

Claim 21 (Cancelled) .